# OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE) U.S. DEPARTMENT OF ENERGY

Hurricane Katrina Situation Report #26 September 7, 2005 (5:00 PM EDT)

### **HIGHLIGHTS**

- Approximately 790,000 customers remain without electric power in Louisiana and Mississippi due to Hurricane Katrina. This is down by nearly 2 million from a peak of 2.7 million customers that were without power after Hurricane Katrina struck the region.
- EIA released its Short Term Energy Outlook today and estimated that normal operations of oil and gas production and distribution would be achieved by December 2005.
- Natural gas transmission pipelines in the path of Katrina survived with minimal damage. Four natural gas processing plants accounting for roughly 5.5 billion cubic feet per day are currently not operating due to hurricane-induced damage. These plants can potentially be bypassed for a period of time while repairs are made with an acceptable impact on natural gas specifications.
- Mississippi Power now estimates that all customers who can receive power will have service restored by the end of the day Sunday 9/11/05.
- ESF-12 was activated by the Federal Emergency Management Agency to support multiple locations. DOE staff are at the National Response Coordination Center (NRCC) at FEMA HQ, FEMA Regions IV and VI, and the State Emergency Operation Centers (EOC) in Louisiana and Mississippi.

#### PETROLEUM AND GAS INFORMATION

- ESF-12 staff in MS and LA report that fuel supplies to local areas are improving. Lines
  at gasoline stations are starting to decrease, especially in MS where power restoration at
  the major terminal in Collins has allowed for improvements in petroleum product
  deliveries.
- According to Wednesday's MMS reports, 19.9 percent of 819 manned platforms and 11.9 percent of 137 rigs have been evacuated in the Gulf of Mexico (GOM). Yesterday's shutin oil production was 860,568 BOPD. The shut-in oil production is equivalent to 57.4 percent of the daily oil production in the GOM, which is currently approximately 1.5 million BOPD. Tuesday's shut-in gas production was 4.035 BCFPD. This shut-in gas production is equivalent to 40.4 percent of the daily gas production in the GOM, which is currently approximately 10 BCFPD.

### Improvement in GOM Shut-in Oil and Gas Over the Past 9 Days

Date	Percent of GOM Oil Shut-in	Percent of GOM Gas Shut-in
August 30	95.20	87.99
August 31	91.45	83.46
September 1	90.43	78.66
September 2	88.53	72.48
September 3	78.98	57.80
September 4	No data reported	No data reported
September 5	69.57	54.13
September 6	58.02	41.06
September 7	57.37	40.36

- Atmos Energy, the country's largest pure natural gas distributor, estimates that approximately 230,000 of its natural gas customers have been affected by Hurricane Katrina, mostly in Louisiana.
- Kinder Morgan Energy Partners, L.P. reported today that its company-owned terminals in Louisiana and Mississippi suffered no significant structural damage as a result of Hurricane Katrina and seven of the nine are in service. KMP's Delta Terminal in Harvey, La., which has storage capacity of about 3 million barrels for petrochemicals and oilfield products, is expected to resume limited operations this week, pending restoration of electric power. KMP is also waiting for electricity service to resume at its International Marine Terminal (IMT) facility in Myrtle Grove, La., which will allow the company to better assess the status of operations and establish a start-up schedule. IMT handles approximately 12 million tons of coal and other materials annually.
- Entergy reports that there has been extensive damage to Entergy's gas distribution system which has affected service to many of Entergy's 147,000 natural gas customers in New Orleans. The company reports that as water is pumped out of the city, company teams of employees will reenter to survey areas for damage and isolate leaks. Areas that are damaged will be identified for repair. Those repairs will be prioritized and worked to return the system to normal operation.
- The lower Mississippi River is open during daylight hours only to all traffic with drafts of at least 39 feet. The Gulf Intercoastal Waterway is still closed from Harvey Lock near New Orleans to Mile Marker 60 (east) with damage to locks and bridges and navigation aids. The Port of New Orleans now reports that its headquarters building has power. The Port of New Orleans riverfront terminals did not sustain major damage from Hurricane Katrina. Over the next several weeks, most of the Port of New Orleans will be dedicated to military relief vessels. The port is not open to commercial traffic.
- The Tables below show, as of September 6, the current status of the refineries impacted by Hurricane Katrina. Improvements continue in the Southeast refinery complex.

**Table 1. Shutdown Refineries** 

Refinery	Location	State	Capacity (bbl/day)	Current Status	
Shell Chemical	Saraland	AL	80,000	Operating at full rate for gasoline and reduced	
				rate for chemicals and other products	
ConocoPhillips*	Belle Chasse	LA	247,000	No power - major damage	
ExxonMobil	Chalmette	LA	187,200	No power - water damage	
Marathon	Garyville	LA	245,000	Restarted – expecting full operation by the	
				end of today	
Motiva (Shell)	Convent	LA	235,000	Restarted – operating at reduced rates expect	
				full production later this week.	
Motiva (Shell)	Norco	LA	226,500	Limited damage, continue to make repairs –	
				expecting to restart later this week	
Murphy	Meraux	LA	120,000	No power – water is starting to recede,	
				currently making assessment of damage,	
				leaking crude oil tank repaired	
Shell Chemical	St Rose	LA	55,000	Shutdown – awaiting Norco restart	
Valero	St. Charles	LA	185,000	Restarting – expecting to be fully operational	
				within one week.	
ChevronTexaco*	Pascagoula	MS	325,000	Damage unknown – assessment being made	

#### Table 2. Refineries with Reduced Runs

Refinery	Location	State	Capacity (bbl/day)	Current Status	
Marathon	Catlettsburg	KY	222,000	OK	
ConocoPhillips*	Lake Charles	LA	239,400	OK	
ExxonMobil*	Baton Rouge	LA	493,500	Ok – receiving SPR	
Valero	Krotz Springs	LA	80,000	Close to 100 percent - receiving SPR	
Total*	Port Arthur	TX	211,500	OK - receiving SPR	

**Table 3. Refineries at Normal Production** 

Refinery	Location	State	Capacity (bbl/day)	Current Status	
ConocoPhillips	Wood River	IL	306,000	OK	
ExxonMobil*	Joliet	IL	238,000	OK	
PDV Midwest	Lemont	IL	160,000	OK	
Marathon	Robinson	IL	192,000	OK	
BP	Whiting	IN	410,000	OK – receiving SPR	
Citgo*	Lake Charles	LA	324,300	OK	
Placid Oil*	Port Allen	LA	48,500	OK – receiving SPR	
Marathon	Detroit	MI	74,000	OK	
BP	Toledo	OH	160,000	OK – receiving SPR	
Marathon	Canton	OH	73,000	OK	
Premcor	Lima	OH	158,400	OK – receiving SPR	
Premcor*	Memphis	TN	180,000	OK – receiving SPR	
ExxonMobil*	Beaumont	TX	348,500	OK	
Motiva (Shell)*	Port Arthur	TX	285,000	OK	
Premcor	Port Arthur	TX	247,000	OK	

<sup>\*</sup> Refineries with company owned and operated on-site power generation.

# **ELECTRICITY INFORMATION**

#### **STATE OUTAGE DATA**

Utility	Customers w/o Power	% Customers w/o Power from Katrina
Louisiana*	488,945	50%
Mississippi	301,102	21%

<sup>\*</sup>Louisiana data is reported by the Louisiana Public Service Commission and their percentage outage numbers are used in calculating the percentage of total outage.

# **STATE REPORTS**

# Mississippi and Louisiana

- In Louisiana 488,945 customers remain without power, as reported by the Louisiana Public Service Commission (LAPSC) (2:00 PM 9/7/05).
- The Association of Louisiana Electric Cooperatives reported that more than 700 workers from throughout the country are involved in the restoration effort at Washington-St. Tammany (WST) Electric Cooperative. In WST territory, an estimated 3,500 miles of power lines and poles were blown to the ground.

Louisiana Outage Data (12:00 PM 9/7/05)

UTILITY	OUTAGES	% customers w/o power
Entergy Louisiana	194,370	45%
<b>Entergy Gulf States</b>	35	<1%
<b>Entergy New Orleans</b>	198,228	92%
DEMCO	1,533	4%
SLECA	362	2%
Wash-St. Tammany	35,707	79%
CLECO	58,710	74%
Total	488,945	50%

<sup>\*</sup>Louisiana data and percentages are reported by the Louisiana Public Service Commission.

- As of 12:00 PM Wednesday 9/7/05, Mississippi has 301,102 customers without power, which represents 21 percent of customers in the state, including 41,358 Entergy customers, 102,568 Mississippi Power customers, 152,940 customers of the Electric Power Associations of Mississippi, and 4,236 TVA customers.
- Cleco Corp., a Co-op servicing Louisiana, estimates that it will have power restored to 80 percent of its customers who can take electricity within the next two weeks. Cleco has approximately 2,800 employees, contractors, and workers from other utilities assisting in the restoration efforts. OE is facilitating delivery of fuel supplies to support these restoration efforts.
- Mississippi Power now estimates that all customers who can receive power will have service restored by the end of the day Sunday 9/11/05. Mississippi Power had lost electric service to all of its customers after Katrina. The company lost all of its systems, including telecommunications, and suffered extensive facilities damage, including the use of all generating units at Plant Watson in Gulfport. Restoration crews totaled 9,200 on 9/6/05. Restoration goals by locale remain:
  - September 7: Leakesville, Lucedale, Meridian, Richton
  - September 8: Bay St. Louis, Long Beach, Wiggins/Saucier
  - September 9: Pascagoula/Moss Point, Pass Christian, DeLisle
  - September 10: Hattiesburg, Laurel
  - September 11: Biloxi, Gulfport, Picayune, Poplarville
- The Electric Power Associations of Mississippi (EPAOFMS) estimated that more than 50,000 utility poles were destroyed by Katrina. All 25 electric power associations suffered some loss of service during the storm. Fifteen of those co-ops have completely restored power. Coast Electric Power Association in Bay St. Louis and Southern Pine Electric Power Association in Taylorsville are currently reporting the most outages. More than 7,605 co-op crew members from Mississippi and 14 other states as far away as Pennsylvania are assisting in restoration in the state.

- Entergy reports that there is extensive damage in south Mississippi, with a large number of rural customers that will take an extended time to restore. Overall, they have made significant strides in restoring power in Mississippi with only a few thousand customers still without power in the Jackson area. All customers in Jackson who can take service should have their service restored by the end of today.
- In Louisiana, Entergy reports that they are completing restoration in the Baton Rouge area and moving east and south toward the harder hit areas in Hammond, Amite, and Bogalusa. They have begun moving resources into the Metro New Orleans area as access permits. Heavy damage, restricted access, and congestion in urban areas will slow the pace of remaining restoration. Entergy has also made progress toward getting service to some of the city pumping stations and the Central Business District. Several of the large hotels along with Bell South's operations center have had power restored. The company reports that they are still several days from being able to begin providing service to the French Quarter.
- Entergy workers are being housed in tent cities. The company reports that heavy traffic in Jefferson parish has impeded movement since residents have been allowed to check their property by the parish.
- Entergy has 17 generating units in the New Orleans area that are fueled by natural gas and/or oil. Currently, generation capacity is sufficient to meet load, and fuel supplies are adequate.

# Florida

• The FRCC State Capacity Emergency Coordinator declared a Generating Capacity *Advisory* for Wednesday, September 7, 2005. This is a reduced level of concern from the *Alert* that has been in effect since Hurricane Katrina impacted the natural gas production facilities in the Gulf of Mexico Region. Although there is still considerable uncertainty as to when normal natural gas production levels will resume, current production levels appear to have stabilized.